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[Signature]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ATTY.'S DOCKET: ADESSI=1

In re Application of:)	Art Unit:
)	
ADESSI et al.)	Examiner:
)	
Appln. No.: 09/806,531)	Washington, D.C.
)	
Filed: March 30, 2001)	July 2, 2001
)	
For: METHODS OF NUCLEIC ACID)	
AMPLIFICATION AND)	
SEQUENCING)	

INFORMATION DISCLOSURE STATEMENT [IDS]

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir :

This Information Disclosure Statement is submitted in accordance with 37 CFR §§1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

[X] 1. This IDS should be considered, in accordance with 37 CFR §1.97, as it is filed:

(Check one of the boxes A-D)

[] A. within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application.

☒ B. before the mailing date of a first office action on the merits.

☐ C. after (A) and (B) above, but before final rejection or allowance, and Applicants have made the necessary certification (box "i" below) or paid the necessary fee (box "ii" below).

(Check one of the boxes "i" and "ii" below:)

☐ i. Counsel certifies that, upon information and belief, each item of information listed herein was either

☐ (a) first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or

☐ (b) not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in §1.56(c) more than three months prior to the filing of this IDS.

(use one and delete other of following)

☐ ii. A check (check no. _____) for the fee set forth in §1.17(p), presently believed to be \$180, is enclosed.

☐ ii. Credit Card Payment Form, PTO-2038, is attached authorizing payment of the fee set forth in §1.17(p), presently believed to be \$180.

☐ D. after (A), (B) and (C) above, but before payment of the issue fee: Applicant(s) petitions under 37 CFR §1.97(d) for consideration of this IDS. ***(use one and delete***

other of following and this note) A check (check no. _____) for/ Credit Card Payment Form, PTO-2038, is attached authorizing payment of the fee set forth in \$1.17(i), presently believed to be \$130 is enclosed. Counsel certifies that, upon information and belief, each item of information listed herein was either

(Check one of the boxes "a" and "b" below)

☐ (a) first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or

☐ (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was not known to any individual designated in \$1.56(c) more than three months prior to the filing of this IDS.

☒ 2. In accordance with 37 CFR \$1.98, this IDS includes a list (e.g., form PTO-1449) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A and/or B and fill in blanks, if appropriate)

☐ A. Document(s) _____ is (are) deemed substantially cumulative to document(s) _____, and, in accordance with \$1.98(c), only a copy of each of the latter documents is enclosed.

☐ B. Certain documents were previously cited by or submitted to the Office in the following prior application(s), which are relied upon under 35 U.S.C. 120:

(insert serial numbers and filing dates of prior applications)

Applicant(s) identifies these documents by attaching hereto copies of the forms PTO-892 and PTO-1449 from the files of the prior application(s) or a fresh PTO-1449 listing these documents, and request that they be considered and made of record in accordance with §1.98(d). Per 37 CFR §1.98(d), copies of these documents need not be filed in this application.

☐ 3. Document(s) _____ is (are) not in the English language. In accordance with §1.98(c), Applicant(s) states:

☐ An English translation of each document _____ (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application, or English-language abstract (or claim) is enclosed.

☐ A concise explanation of the relevance of document(s) _____ is found in the attached _____ search report (see reply to Comment 68 in the preamble to the final rules; 1135 OG 13 at 20).

☐ A concise explanation of the relevance of document(s) _____ is set forth as follows:

(insert concise explanation of relevance)

☐ A concise explanation of the relevance of document(s) _____ can be found on page(s) _____ of the specification.

☐ A concise explanation of document(s) _____ can be found on the attached sheet.

[X] 4. No explanation of relevance is necessary for documents in the English language (see reply to Comments 67 and 68 in the preamble to the final rules; 1135 OG 13 at 20).

[X] 5. Other information being provided for the examiner's consideration follows:

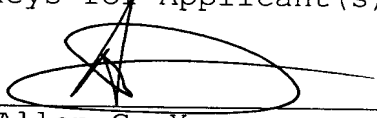
Attached hereto is the corresponding European Search Report

6. In accordance with 37 CFR §§1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant(s) reserves the right to prove that the date of publication is in fact different.

Respectfully submitted,

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Attorneys for Applicant(s)

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PATENT & TRADEMARK OFFICE '90

PTO/SB/08A (10-96)

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet | 1

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3

Complete if Known

Application Number

09/806,531

Filing Date

March 30, 2001

First Named Inventor

Celine ADESSI et al.

Group Art Unit

Examiner Name

Attorney Docket Number

ADESSI=1

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner
Signature

Date
Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/806,531
		Filing Date	March 30, 2001
		First Named Inventor	Celine ADESSI et al.
		Group Art Unit	
		Examiner Name	
Sheet 2	of 3	Attorney Docket Number	ADESSI=1

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	AI	BEATTIE et al., "Hybridization of DNA targets to glass-tethered oligonucleotide probes", <u>Molecular Biotechnology</u> , 4:213-225 (1995)	1
	AJ	POSTER ABSTRACTS - BLANCHARD et., "Oligonucleotide array synthesis using ink jets", page 225	2
	AK	CHEE et al., "Accessing genetic information with high-density DNA arrays", <u>Science</u> , 274(5287)610 (October 5, 2001)	3
	AL	CHRISEY et al., "Covalent attachment of synthetic DNA to self-assembled monolayer films", <u>Nucleic Acids Research</u> , 24(15)3031-3039 (1996)	4
	AM	CHU et al., "Derivatization of unprotected polynucleotides", <u>Nucleic Acids Research</u> , 11(18)6514-6529 (1983)	5
	AN	EGAN et al., "Structural studies and chemistry of bacterial capsular polysaccharides. Investigations of Phosphodiester-linked capsular polysaccharides isolated from <i>Haemophilus influenzae</i> Types a, b, c, and f: NMR spectroscopic identification and chemical modification of end groups and the nature of base-catalyzed hydrolytic depolymerization", <u>J. Am. Chem. Soc.</u> , 104:2898-2910 (1982)	6
	AO	FODOR et al., "Light-directed, spatially addressable parallel chemical synthesis", <u>Science</u> , 251:767-773 (1991)	7
	SP	GHOSH et al., "Covalent attachment of oligonucleotides to solid supports", <u>Nucleic Acids Research</u> , 15:5353-5371 (1987)	8
	AQ	GIHAM, "The synthesis of Celluloses containing covalently bound nucleotides, polynucleotides, and nucleic acids", <u>Biochemistry</u> , 2810-2813 (1968)	9
	AR	GINGERAS et al., "Hybridization properties of immobilized nucleic acids", <u>Nucleic Acids Research</u> , 15:5373-5390 (1987)	10
	AS	GUO et al., "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports", <u>Nucleic Acids Research</u> , 22(4)5456-5465 (1994)	11
	AT	JOOS et al., "Covalent attachment of hybridizable oligonucleotides to glass supports", <u>Analytical Biochemistry</u> , 247:96-101 (1997)	12

Examiner Signature	Date Considered
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3

of 3

Complete if Known

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Group Art Unit	
Examiner Name	
Attorney Docket Number	ADESSI=1

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	AU 13	KREMSKY et al., "Immobilization of DNA via oligonucleotides containing an aldehyde or carboxylic acid group at the 5' terminus", <u>Nucleic Acids Research</u> , 2891-2909	(
	AV 14	LOCKHART et al., "Expression monitoring by hybridization to high-density oligonucleotide arrays", <u>Nature Biotechnology</u> , 14:1675-1680 (1996)	<
	AW 15	LUND et al., "Assessment of methods for covalent binding of nucleic acids to magnetic beads, Dynabeads™, and the characteristics of the bound nucleic acids in hybridization reactions", <u>Nucleic Acids Research</u> , 16:10860-10881	/
	AX 16	O'DONNELL-MALONEY et al., "The development of microfabricated arrays for DNA sequencing and analysis", <u>Tibtech</u> , 14:401-407 (1996)	/
	AY 17	OROSKAR et al., "Detection of immobilized amplicons by ELISA-like techniques", <u>Clinical Chemistry</u> , 42(9):1547-1555 (1996)	/
	AZ 18	PEETERS et al., "Comparison of four biofunctional reagents for coupling peptides to proteins and the effect of the three moieties on the immunogenicity of the conjugates", <u>Journal of Immunological Methods</u> , 120:133-143 (1989)	/
	BA 19	RASMUSSEN et al., "Covalent immobilization of DNA onto polystyrene microwells: The molecules are only bound at the 5' end", <u>Analytical Biochemistry</u> , 198:138-142 (1991)	/
	BB 20	SAIKI et al., "Enzymatic amplification of β -globin genomic sequences and restriction site analysis for diagnosis of sickle cell anemia", <u>Science</u> , 230:1350-1354 (1985)	/
	BC 21	THOMAS et al., "Affymetrix: genes on chips", <u>Exp. Opin. Ther. Patents</u> , (8)503-508 (1998)	/
	BD 22	WOLF et al., "Rapid hybridization kinetics of DNA attached to submicron latex particles", <u>Nucleic Acids Research</u> , 15:2911-2926 (1987)	/
	BE 23	YANG et al., "Covalent immobilization of oligonucleotides on modified glass/silicon surfaces for solid-phase DNA hybridization and amplification", <u>Chemistry Letters</u> , (1998)	/
	BF 24	YERSHOV et al., "DNA analysis and diagnostics on oligonucleotide microchips", <u>Proc. Natl. Acad. Sci. USA</u> , 93:4913-4918 (1996)	/

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